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# PATENT ABSTRACTS OF JAPAN

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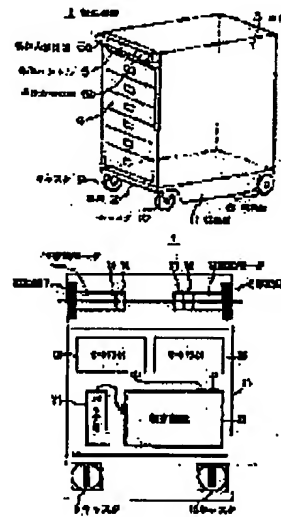
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## (54) CARRIER APPARATUS

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To maintain stop of a carrier apparatus, by fixing automatically its wheels when stopping it.

**SOLUTION:** A carrier apparatus 1 has in a carriage 2 a drive portion 11 for driving drive wheels 7, 8. In the drive portion 11, there are provided a drive motor 12 for driving the left-side drive wheel 7 and a drive motor 13 for driving the right-side drive wheel 8. In the drive motors 12, 13, there are provided integrally with them rotational speed sensors 14, 15 for sensing respectively the rotational speeds of the drive wheels 7, 8 and electromagnetic brakes 16, 17 for applying respectively braking forces to the drive wheels 7, 8. When the sensed running speed of the carrier apparatus 1 by the rotational speed sensors 14, 15 falls below a predetermined value set previously, a controller 20 fixes the drive wheels 7, 8 by the electromagnetic brakes 16, 17 to stop the carrier apparatus 1. When one of the sensed operating forces by operating-force sensing portions 6a, 6b exceeds a predetermined value set previously, the controller 20 releases the fixing of the drive wheels 7, 8 by the electromagnetic brakes 16, 17 to make movable the carrier apparatus 1.



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